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SUMMARY

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LOW-COST, ONE-FAMILY HOUSING ADAPTED TO LOCAL SOCIAL, ECONOMIC AND TECHNICAL CONDITIONS

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Low-cost, One-family Housing Adapted to Local Social, Economic and Technical Conditions

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Summary

1. The dynamic growth of urbanistic processes in the developing countries presents housing as a key problem while the glaring disproportion between demand and the resources of manpower and materials calls for the most careful consideration and presentation of organisational policy. The individual structure of towns and settlements in developing countries, quite different from that of industrial countries, requires the elaboration of specific, individual methods of solution.

Methods are primarily determined by: geographical situation; climate; national traditions, social structure, the degree of economic development and above all by available manpower and materials. Thus the execution of investment plans must be based on completely new models of physical and technical planning, elaborated separately for each country.

2. Bearing in mind the basic significance of a solution of these issues for the formation of new social structures there should be maximum emphasis on and a flexible approach to:

- the planning of housing norms and standards
- the determination of the principles on which housing estates are provided with technical services and public utility buildings
- the determination of principles for the physical and architectural planning of aggregates
- in maintaining the traditional but speedily-evolving structure of the family and in providing optimum living conditions for the greatest number of people within the limits of available resources.

Help on these matters may be derived from the use of questionnaires applied before and after taking up residence. In projecting public utility services for housing estates terrain must be reserved for buildings which will be required with the growth and modernisation of social structures.

For these same reasons the possibility must be envisaged in designs of the segmentary extension of structures. For residential buildings the extension could start from the nucleus unit /the kitchen, sanitary installations with a living room/. The premises can then be further extended to the full capacity of the building site.

3. Terrace buildings may be accepted as being the most desirable form of construction in many of the countries with which we are concerned. This applies in particular to the atrium type, which is in any case traditional for a number of regions.

This system has now been reintroduced into a number of European countries and is highly valued for its economy. Simultaneous emphasis must be laid on the introduction of most modern elements

of town-planning both in general and in detail.

4. In architectural design the trend should be towards the simplest and lightest construction while stress should also be laid on standardization, as leading to further economy. This should apply in particular to construction elements and equipment. Naturally a prerequisite for industrial production will be the establishment of a modulus and of a planning grid. Standard designs must be adapted in their variants to local conditions and the needs of the occupants. The vast territories with their widely-varying conditions in the countries with which we are concerned may complicate the problem more than under European conditions. In such a case the most rational solution is based on repetitive designs according to the standards accepted for the given housing estate. The standardisation of construction elements should naturally be accompanied by standardisation of equipment.

5. The analysis of all the above-mentioned issues and the elaboration of a solution for them will meet with much difficulty in some cases for individual countries. A solution of the problem requires the introduction of models derived from comparative analysis of the previously-mentioned factors, and assignment by the similarities of these factors.
These models would serve the states of each sector in obtaining the most economic solution with a minimum of investments. This work could be undertaken by appropriate international institutes.

6. The above-mentioned difficulties make it imperative to dispose the execution of housing plans over a number of stages. We may simplify this by reducing them to two stages:

Stage I - the acceptance of all technological solutions which draw on the local labour market and achieve desired effects with a minimum of imports and the greatest possible restriction of investment means.
At this stage it will be necessary to improve at least to some extent the qualifications of the workers so that they work more efficiently and learn to manipulate more complicated equipment. While carrying out town-planning and architectural design in the most rational manner stress must be laid on the gradual raising of standards, on research into work methods and on the establishment of an equipment and material base.

Stage II - will depend to a greater extent on the overall economic development of the country. The introduction at this stage of modern technological methods must be accompanied by an adapted structure of building administration and the maximum modernisation of building regulations, the establishment of investment organisation and specialised enterprises working on the basis of stationary or polygon prefabrication plants. The overall policy of the training of the higher and medium-qualified technical personnel, with the maximum participation of students in current work must be related to the formation of the industrial base for building.

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